In re David R. Cheriton, Application No. 09/981,125
Amendment B

Amendments to the Claims:

The listing of clams will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (previously presented): A packet switching system comprising:

a packet stream splitter;

an input interface of the packet switching system, and

a plurality of packet switches;

wherein the input interface includes a plurality of configurable filters coupled to the packet stream splitter and each of said configurable filters is communicatively coupled to a different single one of said packet switches;

wherein the packet stream splitter is configured to receive a packet stream and to provide a copy of said received packet stream to each of said configurable filters; and

wherein each of said configurable filters is configured to forward an identifiable set of packets of said received packet stream such that each packet of said received packet stream is forwarded by a single one of said configurable filters regardless of the packet switching system being in a normal operating mode or a second operating mode; and wherein all packets forwarded by a configurable filter are forwarded to its corresponding said different single one of said packet switches; and

wherein in a normal operating mode, each of said configurable filters is configured such that there is at least one packet in its said identifiable set of packets; and wherein in a second operating mode, a particular configurable filter of said configurable filters is configured to forward no packets, and said identifiable set of packets of at least one said configurable filters other than the particular configurable filter is different than when in the normal operating mode in order for all packets of said received stream of packets to be forwarded by a single one of said configurable filters.

Claims 2-5 (canceled)

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Claim 6 (previously presented): The packet switching system of claim 1, wherein said configurable filters include exactly two configurable filters including the particular configurable filter and a second configurable filter, and in the second operating mode, the second configurable filter is configured to forward all packets of said received packet stream.

Claim 7 (canceled)

Claim 8 (previously presented): The packet switching system of claim 1, wherein each of said configurable filters determines whether to drop or forward a particular packet of said received packet stream based on at least one value contained within the particular packet.

Claim 9 (previously presented): The packet switching system of claim 1, wherein each of said configurable filters determines whether to drop or forward a particular packet based on a value of a source address, a destination address, a packet type, or a quality of service of the particular packet.

Claim 10 (previously presented): The packet switching system of claim 1, wherein said received packet steam is received in an optical signal by the packet stream splitter and the packet stream splitter includes an optical splitter such that each of said configurable filters receives said optical signal.

Claim 11 (original): The packet switching system of claim 1, wherein the packet stream splitter includes an electrical splitter.

Claim 12 (canceled)

Claim 13 (previously presented): The packet switching system of claim 1, comprising a packet stream merger coupled to the each of said packet switches configured to merge packets received from said configurable filters.

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Claim 14 (canceled)

Claim 15 (original): A packet switching system comprising:

a packet stream splitter; and

a first and a second configurable filters coupled to the packet stream splitter, the first and the second configurable filters each including a normal operating state;

wherein the packet stream splitter is configured to provide a received packet stream to each of the first and the second configurable filters; and

wherein when the first and the second configurable filters are in their respective normal operating states: a particular packet is forwarded only by one of the first and the second configurable filters and both the first and second configurable filters are configured to forward at least one packet.

Claim 16 (original): The packet switching system of claim 15, wherein the first configurable filter further includes an all packet forwarding state, wherein the first configurable filter is configured to switch between the normal operating state and the all packet forwarding state in response to a signal.

Claim 17 (original): The packet switching system of claim 16, wherein the signal is generated in response to detection of an error condition affecting a set of packets forwarded by the second configurable filter.

Claim 18 (original): The packet switching system of claim 17, wherein the second configurable filter further includes an all packet blocking state, wherein the second configurable filter is configured to switch between the normal operating state and the all packet blocking state in response to the signal.

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Claim 19 (original): The packet switching system of claim 15, wherein the first and the second configurable filters determine whether to drop or forward a particular packet based on at least one value contained within the particular packet.

Claim 20 (original): The packet switching system of claim 15, wherein the first and the second configurable filters determine whether to drop or forward a particular packet based on a value of a source address, a destination address, a packet type, or a quality of service of the particular packet.

Claim 21 (original): The packet switching system of claim 15, wherein the first and the second configurable filters are each configured to forward approximately one-half of the packets received by the respective first or second configurable filter.

Claim 22 (previously presented): A packet switching system comprising:
a first means for filtering and forwarding;
a second means for filtering and forwarding; and
means for providing a received packet stream to each of the first means for filtering and forwarding and the second means for filtering and forwarding
wherein the first means for filtering and forwarding is configured to forward a first identifiable set of packets of said received packet stream, and the second means for filtering and forwarding is configured to forward a second identifiable set of packets of said received packet steam;
wherein when said first and second means for filtering and forwarding are in their respective normal operating states: a particular packet of the single received packet stream is forwarded only by one of said first and second means for filtering and forwarding and both said first and second means for filtering and forwarding are configured to forward at least one packet.

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Claim 23 (original): A method comprising:

receiving a stream of packets;

providing the stream of packets to a first and a second configurable filters;

the first configurable filter determining whether or not to forward a particular packet

from the stream of packets based on a first programmable filtering scheme;

the second configurable filter determining whether or not to forward a particular

packet from the stream of packets based on a second programmable filtering scheme;

wherein a particular packet is forwarded only by one of the first and the second

configurable filters and both the first and second configurable filters are configured to forward

at least one packet.

Claim 24 (original): The method of claim 23, further comprising:

the first configurable filter receiving a first signal;

the first configurable filter, in response to receiving the first signal, modifying its

filtering scheme to forward all packets or to drop no packets;

the second configurable filter receiving a second signal; and

the second configurable filter, in response to receiving the second signal, modifying its

filtering scheme to forward no packets or to drop all packets.

Claim 25 (original): The method of claim 23, wherein the first and the second

configurable filters determine whether to drop or forward a particular packet based on at least

one value contained within the particular packet.

Claim 26 (original): The method of claim 23, wherein the first and the second

configurable filters determine whether to drop or forward a particular packet based on a value

of a source address, a destination address, a packet type, or a quality of service of the

particular packet.

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Claim 27 (original): The method of claim 23, wherein the first and the second configurable filters are each configured to forward approximately one-half of the packets received by the respective first or second configurable filter.

Claim 28 (canceled)

Claim 29 (previously presented): The packet switching system of claim 1, wherein the input interface includes the packet stream splitter.

Claim 30 (previously presented): The packet switching system of claim 1, wherein said configurable filters include more than two configurable filters including the particular configurable filter and a plurality of other configurable filters, and in the second operating mode, the packets in said identifiable set of packets corresponding to the particular configurable filter in the normal operating mode are redistributed among said identifiable set of packets of at least two of said other configurable filters.

Claim 31 (previously presented): The packet switching system of claim 22, wherein said first means for filtering and forwarding includes an all packet forwarding state, wherein the first configurable filter is configured to switch between the normal operating state and the all packet forwarding state in response to a signal.

Claim 32 (previously presented): The packet switching system of claim 31, wherein the signal is generated in response to detection of an error condition affecting a set of packets forwarded by said second means for filtering and forwarding.

Claim 33 (previously presented): The packet switching system of claim 32, wherein said second means for filtering and forwarding includes an all packet blocking state, wherein said second first means for filtering and forwarding is configured to switch between the normal operating state and the all packet blocking state in response to the signal.

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